

# **B1100S**

# **B1500S**

# **B1900S**

Operation, Maintenance and Installation manual  
Libretto istruzioni per l'uso, la manutenzione e l'installazione  
Bedienungs- und Wartungsanleitung  
Mise en route , entretien et installation  
Bedienings-, onderhouds- en installatiehandleiding  
Manual de instrucciones para el uso, mantenimiento e instalación  
Manual de instruções de uso, manutenção e instalação  
Handbok för användning, underhåll och installation  
Käyttö-, huolto- ja asennusohje  
Bruks- vedlikeholds- og installasjonsanvisning  
Betjenings-, vedlikeholdelses- og installationsvejledning

 **Dometic**

## ENGLISH

**With Dometic at home everywhere.** Thank you for your decision to buy an Dometic product. They all have been specially conceived for your vehicle, matching totally the requirements of leisure on wheels - with more than 75 years of experience, the most advanced technology, first-rate materials, superb workmanship, functional design and a care for the environment. The unique Dometic EuroService Guarantee offers you additional peace of mind - ensuring that you will derive great comfort everywhere from your Dometic products.

## ITALIANO

**Con Dometic come a casa, ovunque.** Vi ringraziamo per averci scelto. I prodotti Dometic sono stati espresamente concepiti per il Vostro veicolo; soddisfacendo completamente le esigenze del tempo libero, sui mezzi mobili, con un'esperienza di oltre 75 anni, la tecnologia più avanzata, materiali di prima qualità, superba squadra di tecnici nonché design funzionale ed attenzione per l'ambiente. Usufruire del Servizio di Garanzia Europea che Vi offre completa tranquillità assicurando Vi che trarrete grande comfort ovunque grazie ai "Vostri" prodotti Dometic.

## DEUTSCH

**Mit Dometic überall wie zu Hause.** Wir danken Ihnen für Ihre Wahl. Die Dometic-Produkte wurden speziell für Ihr Fahrzeug entwickelt und tragen den Erfordernissen der Freizeit auf Rädern voll Rechnung - mit einer mehr als 75-jährigen Erfahrung, modernster Technologie, erstklassigen Materialien, einem hervorragenden Technikerteam, funktionellem Design und Umweltfreundlichkeit. Nutzen Sie die EuroService-Garantie, mit der Sie ganz ruhig fahren und die Ihnen überall dank "Ihren" Dometic-Produkten größten Komfort sichert.

## FRANÇAIS

**Partout avec Dometic.** Merci d'avoir choisi un produit Dometic. Il a été spécialement conçu pour votre véhicule complétant totalement la gamme d'équipements de votre véhicule de loisirs. Dometic, c'est aussi, 75 ans d'expérience, une technologie avancée, du matériel de premier choix ,un design fonctionnel et la protection de l'environnement. La garantie Européenne Dometic vous offre, où que vous soyez, la possibilité de profiter partout de votre matériel.

## NEDERLANDS

**Met Dometic voelt u zich overal thuis.** Wij danken u voor de aanschaf van een Dometic-product. Onze producten zijn speciaal ontwikkeld voor uw voertuig en voldoen volledig aan de eisen die u stelt aan ontspanning onderweg. Met meer dan 75 jaar ervaring, de meest geavanceerde technologie, eersteklas materiaal, uitstekend vakmanschap, functioneel design en zorg voor het milieu. De unieke Dometic EuroService-garantie is nog een extra geruststelling - zodat u overal veel gemak zult ondervinden van uw Dometic-producten.

## ESPAÑOL

**Con Dometic en todas partes como en casa.** Le agradecemos su elección. Los productos Dometic han sido expresamente concebidos para su vehículo; satisfaciendo totalmente las exigencias del tiempo libre, en medios móviles, con una experiencia de más de 75 años, la tecnología más avanzada, materiales de primera calidad, soberbio equipo de técnicos así como

design funcional y respeto al medio ambiente. Disfruten del Servicio de Garantía Europea que le ofrece tranquilidad absoluta, asegurándole que obtendrá gran confort en cualquier lugar gracias a sus productos Dometic.

## PORTRUGUÉS

**Com Dometic, em todo o lado como em casa.** Agradecemos a sua escolha. Os produtos Dometic foram expressamente concebidos para o seu veículo; satisfazendo totalmente as exigências do tempo livre, em meios móveis, com uma experiência de mais de 75 anos, a tecnologia mais avançada, materiais de primeira qualidade, uma excelente equipa de técnicos e um design funcional e respeito pelo ambiente. Aproveite o Serviço de Garantia Europeia, que lhe oferece uma tranquilidade absoluta e lhe assegura que obterá um grande conforto em qualquer lugar graças aos seus produtos Dometic.

## SVENSKA

**Med Dometic är Du hemma överallt.** Tack för Ditt beslut att köpa en Dometicprodukt. De har utvecklats speciellt för Din husvagn eller husbil och lever upp till alla de krav för fritid på hjul -med mer än 75 års erfarenhet, avancerad teknologi, förstklassigt material, oöverträffat hantverk och design samt omtanke om miljön. Den unika Dometic Europagarantin ger Dig trygghet om något skulle hända.

## SUOMI

**Dometic - kotoaan kaikkiin.** Olemme iloisia siitä, että olet valinnut Dometicin tuotteen. Tuotemme on kehitetty yli 75 vuoden kokemuksella liikkuvan lomanviettäjän tarpeisiin ja valmistettu ensiluokkaisista materiaaleista uusimalla, ympäristöä säästäväällä tekniikalla, toimivalla muotoluulla ja korkealla ammattitaidolla. Dometic tuotteita voit käyttää luottavaisin mielin. Ainutlaatuinen Dometic EuroService -takuu ja laaja huoltoverkosto varmistavat, että saat apua ongelmilanteissa myös matkasi varrella.

## NORSK

**Med Dometic kan du føle deg hjemme overalt.** Takk for at du bestemte deg for å kjøpe et produkt fra Dometic. Alle våre produkter er utviklet spesielt for ditt kjøretøy og lever fullt opp til alle krav om bekjemmelighet i din fritid - basert på mer enn 75 års erfaring, den mest avanserte teknologi, førsteklasses materialvalg og håndverk, funksjonelt design og omtanke for miljøet. Den unike Dometic EuroService-garantien gir deg trygghet og sikrer komfort uansett hvor du måtte befinner deg.

## DANSK

**Med Dometic kan du føle dig hjemme overalt.** Tak for din beslutning om at købe et Dometic produkt. De er alle blevet specielt udviklet til dit køretøj og lever fuldt ud op til kravene om fritid på hjul med mere end 75 års erfaring, den mest avancerede teknologi, førsteklasses materialer, uovertruffen håndværk, funktionelt design og omtanke for miljøet. Den unikke Dometic EuroService Garanti giver dig yderligere ro i sjælen og sikrer, at du takket være dine Dometic produkter vil opleve stor komfort, uanset hvor du befinner dig.

## **Warranty Validity**

'The product is warranted in accordance with the enforced Law and regulations implementing the Directive 1999/44/EC.

The Manufacturer's warranty does not extend to Product failures, defects or damage arising from and/or attributable to a wrong installation.

The Consumer is entitled to let the Product be installed by an authorised dealer, not bound by Dometic.

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Figures, descriptions, references and technical data in this manual are given as mere example and are not binding.

In pursuing a policy of continual product and safety improvement, DOMETIC Reserves the right to make changes at any time without undertaking to give Prior notice or to update this manual every time.

**Keep this document for future reference.**

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Operation, Maintenance and  
Installation manual  
Air conditioner

Libretto istruzioni per l'uso, la manutenzione e

l'installazione

Condizionatore

Bedienungs- und

Wartungsanleitung

Klimaanlage

Mise en route, entretien et

installation

Climatiseur

Handleiding voor bediening,

onderhoud en installatie

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Luftkonditionering

Käytto-, huolto- ja  
asennusohje

Ilmastoointilaite

Brukerveiledning og manual  
til vedlikehold og installasjon

Airconditioner

Brugervejledning og manual  
til vedligeholdelse og installation

Airconditioner

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## 1.1. Scope of the manual

This manual has been made by the Manufacturer and it shall be regarded as part of the air conditioner.

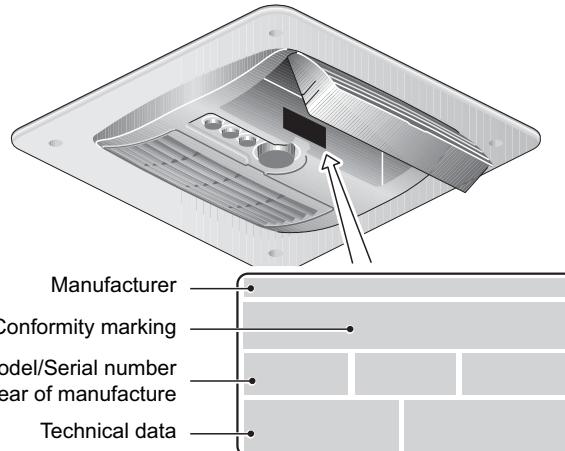
The information it contains, when complied with, ensures a correct and efficient use of the air conditioner.

The first part of this manual is for users , the second one for qualified technicians  facing the installation of the air conditioner.

To draw the readers attention to special parts of the text, the following symbols have been used:

-  This operation may result in dangers
-  Useful advice
-  Environment safety related information

## 1.2. Manufacturer and air conditioner data plate



## 1.3. Description of the air conditioner

This air conditioner has been designed and manufactured to be installed onto vehicles (i.e. camping-cars, caravans, motorhomes) to improve the temperature conditions. It supplies fresh and dehumidified air in summer and warm air in winter without, in any case, replacing the heating system of the vehicle. In both cases, temperature is set by the user.

### Fresh air - Running

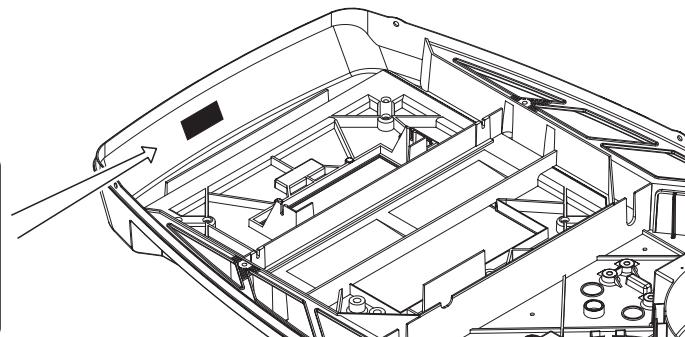
The system is inclusive of: compressor ( a ), condenser ( b ), evaporator ( d ) and refrigerant gas under pressure. According to the physical state of the refrigerant gas -i.e. liquid or gaseous, it heats or cools the components where it passes through.

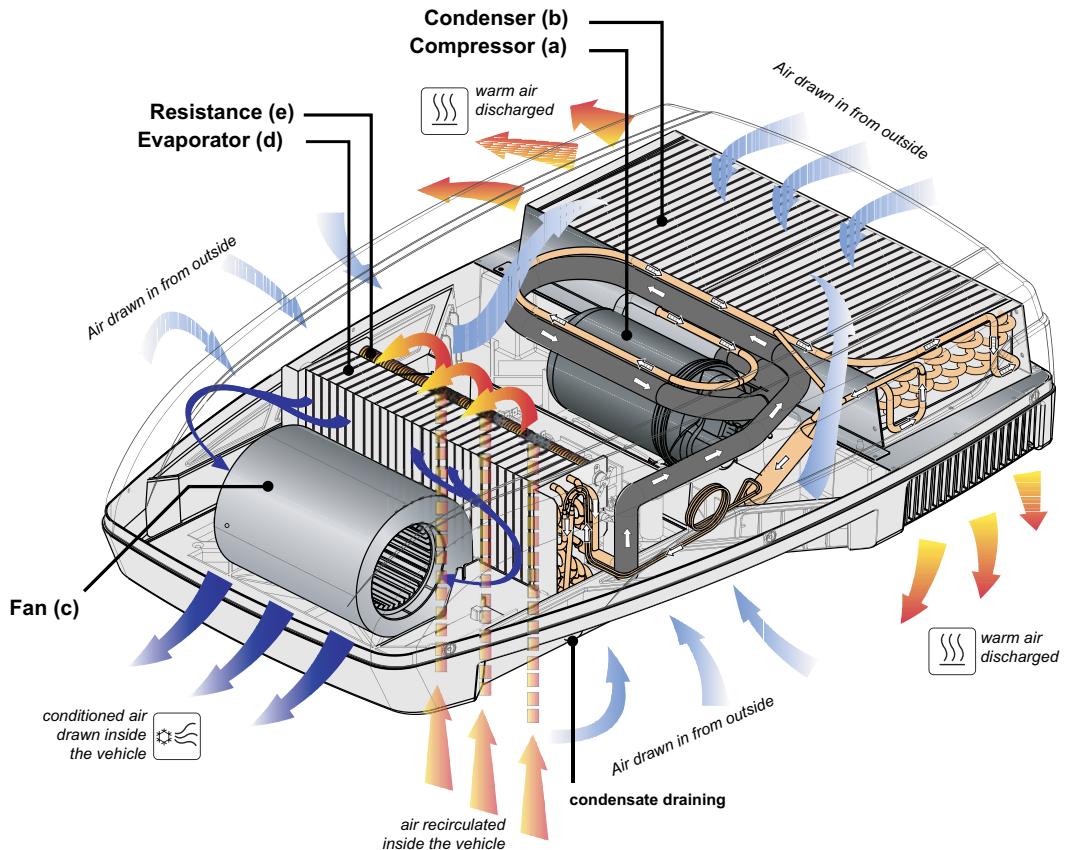
Fan ( c ) forces the internal air through the cooled evaporator from where it comes out cooled down and dehumidified.

This action, protracted over the time, reduces the temperature into the vehicle.

### Warm air - Running

Ambient air is forced by fan ( c ) into an electrical heating resistance ( e ) and then recirculated inside the vehicle.





## 1.4. How to use the air conditioner

**I** The air conditioner performance can be improved by taking some simple measures.

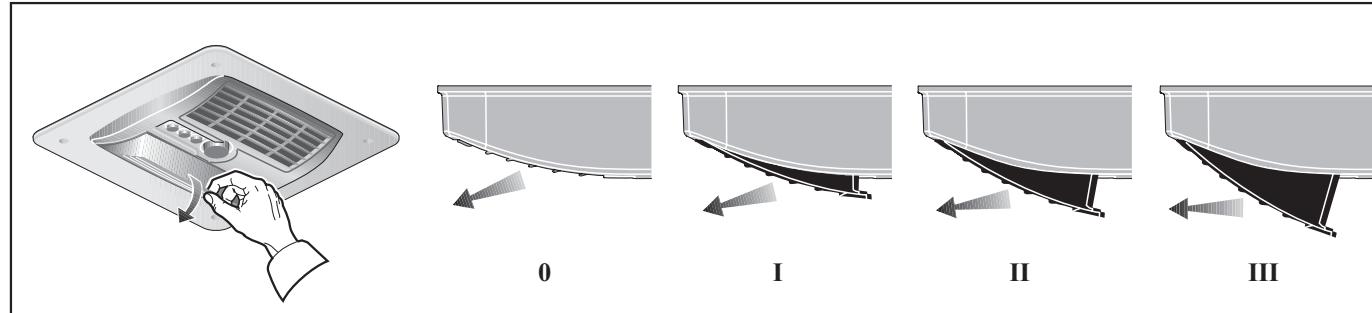
- Improve the thermal insulation of the vehicle by closing any opening and by covering any glassed surfaces with reflecting curtains.
- Avoid opening doors and windows unnecessarily.
- Select the most suitable temperature and speed.
- Properly direct the air flaps.

To prevent troubles and minimise risks for people, take the following precautions:

- Always wait some minutes (at least 3) before attempting to turn the air conditioner on, after turning it off, to prevent damage to the compressor;
- Do not obstruct the air inlets and outlets with cloths, paper or other objects;
- Do not introduce your hands or other objects into the openings;
- Do not spray the air conditioner with water;
- Keep flammable substances away from the air conditioner.

### Adjusting the air direction

Position the flap to direct the air to the desired position.

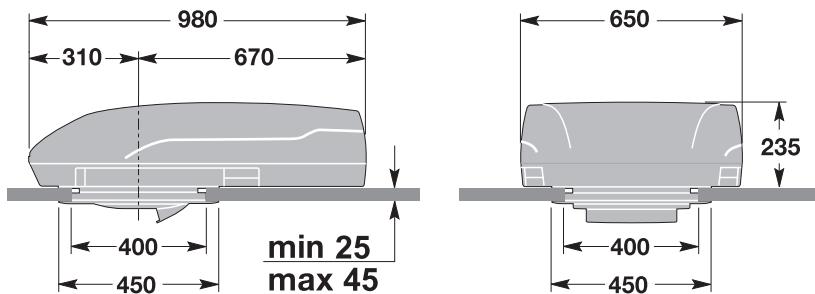


## 1.5. Description of the controls

	Main switch	ON - OFF	Position 0 = air conditioner ON. Position 1 = air conditioner OFF.
	Warm/Cold dual-switch	Warm - Cold	Position 0 = warm air. Position 1 = fresh air.
	Thermostat	Air temperature (18°C-40°C)	By rotating the knob clockwise, temperature increases (max. 40°C) By rotating the knob and clockwise, temperature gets reduced (up to 18°C)
	Fan switch	Air speed	Position 0 = low speed. Position 1 = high speed.

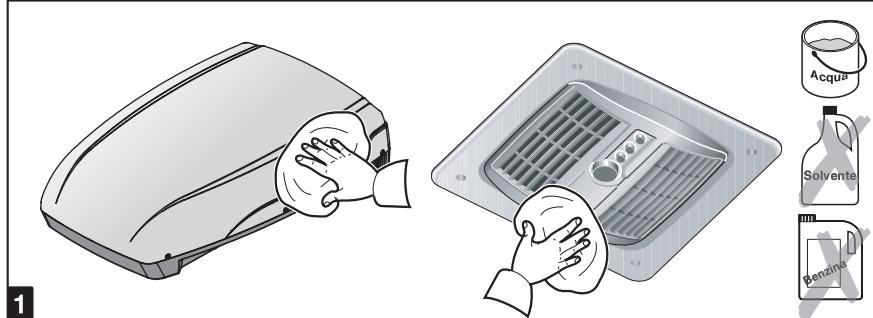
## 1.6. Technical data

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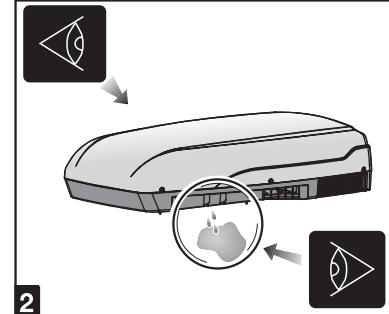


Description	Measurement unit	Model		
		B1100S	B1500S	B1900S
Refrigerant gas (type-quantity)	see data plate			
Refrigerant yield	Watt/h	1000	1500	2000
Cooling consumption	W	500	650	900
Heating capacity	W	800	800	1200
Electrical rating	V/Hz	230/50	230/50	230/50
Protection degree	IP	X4	X4	X4
Conditioned air volume	m³/h	310	310	380
Max internal volume of the vehicle (with insulated walls)	m³	16	20	25
Weight	Kg	29	30	33

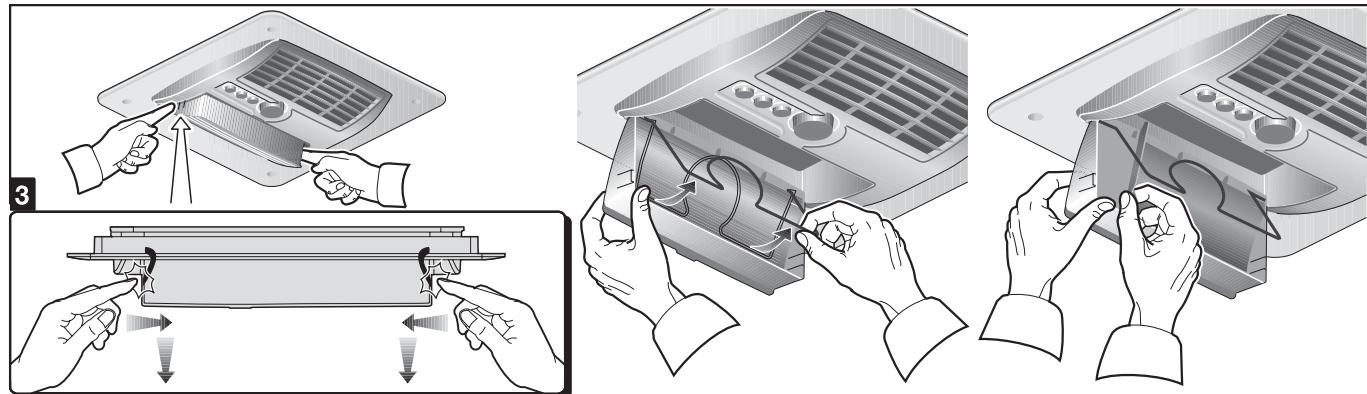
## 1.7. Ordinary maintenance



**Cleaning;** periodically clean the air conditioner and remove dust with a dump cloth. When necessary, use a mild detergent. Do not use petrol or solvents.



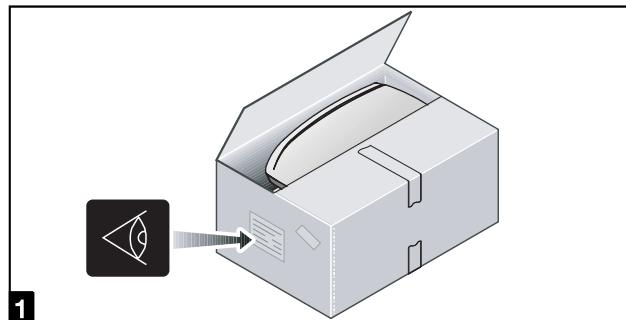
**Checks;** regularly check the air conditioner and make sure that the water outlet holes are not clogged.



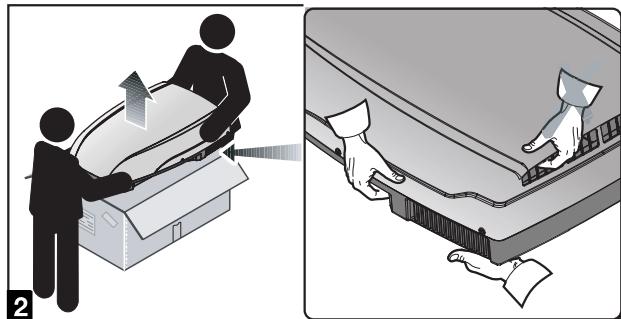
**Filter cleaning ;** periodically carry out this operation; wash the filter with a detergent solution and allow to dry before refitting.

The air conditioner must be installed by skilled technicians. In addition to this requirement, the people making the unit installation must make sure that the working conditions are safe for everybody concerned.

## 2.1. Packaging, unpacking and handling

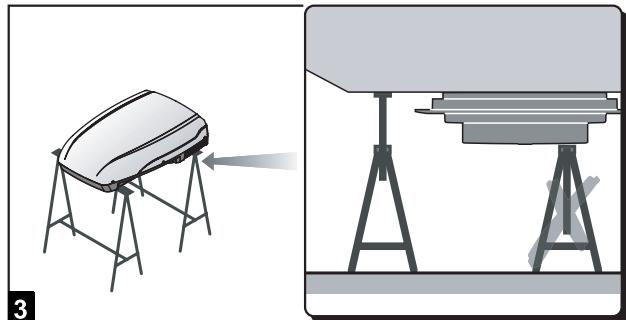


Always follow the instructions printed on the packaging.



Remove the air conditioner from its packaging and make sure that it is not damaged.

**Never use the rear air openings to lift the air conditioner from its packaging**

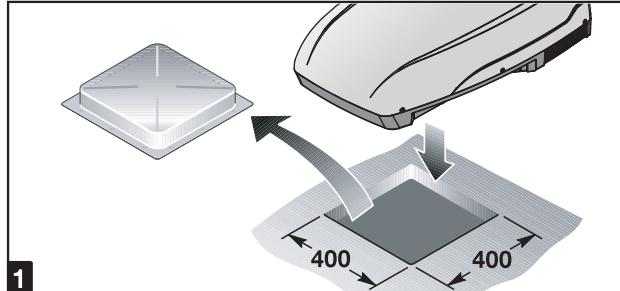


Rest the unit on special supports to protect its bottom.



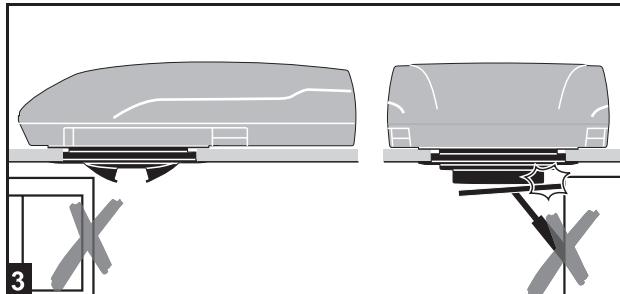
Move the air conditioner to the installation site under safe conditions.

## 2.2. Preparing the roof opening

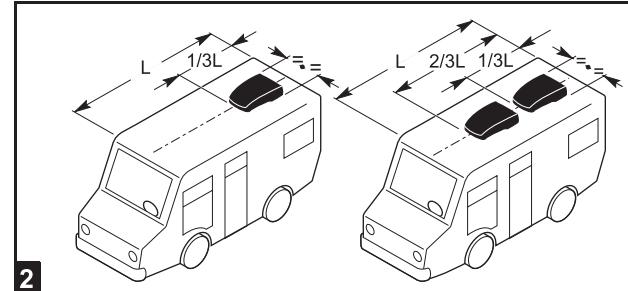


1

To install the air conditioner, the roof shall have an opening of suitable sizes. It is possible to use an existing air inlet or make a new one.



3



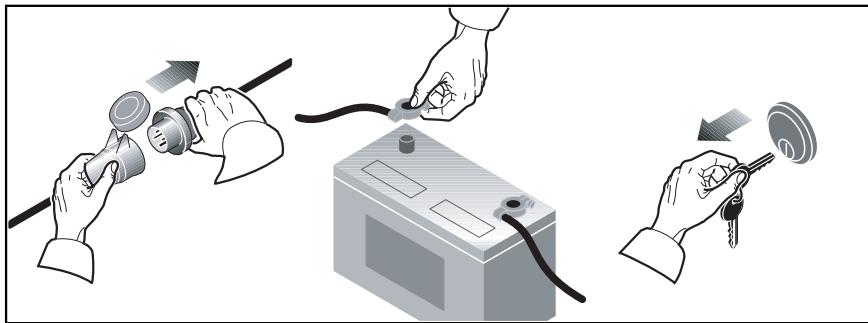
2

According to the vehicle dimensions and depending on the air conditioning needs, one or more units can be installed. The air conditioner must be installed right in the middle with respect to the vehicle width. If only one unit is going to be installed, this must be positioned in the rear part of the vehicle.

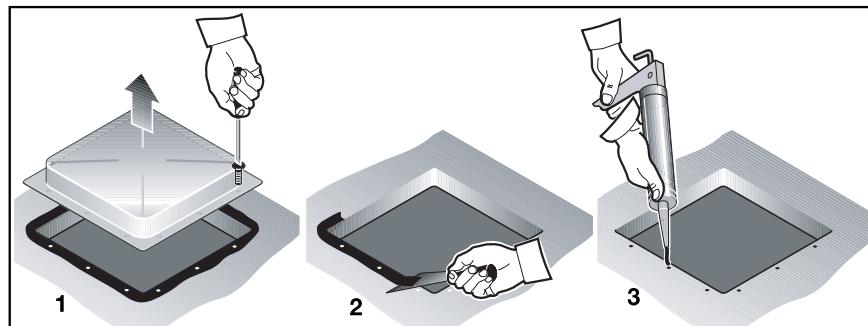
Before installing the unit, make sure that the opening does not interfere with the existing furnishing (lamps, wardrobes, doors, curtains, etc.). This check allows for an easy mounting of the air conditioner and a troublefree air circulation.

**⚠** contact the vehicle manufacturer and make sure that the roof structure can tolerate the static load and the stress transmitted vehicle, especially under running conditions. Sometimes vehicle manufacturers previously arrange areas for the unit installation weakening and/or electric cable from being cut.

**⚠** The air conditioner should preferably be installed on a level plane. Maximum allowed inclination: 10°.

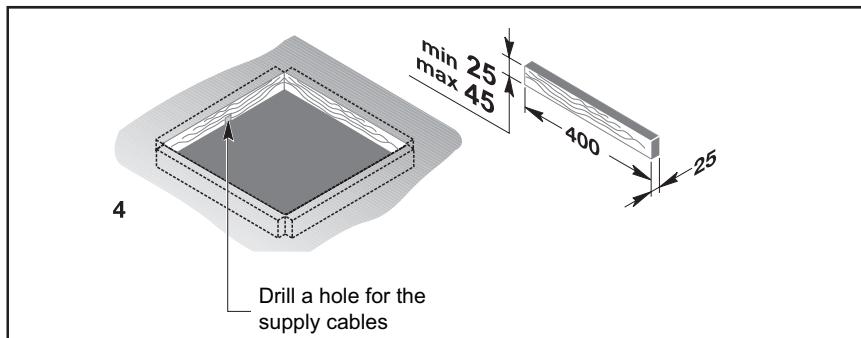
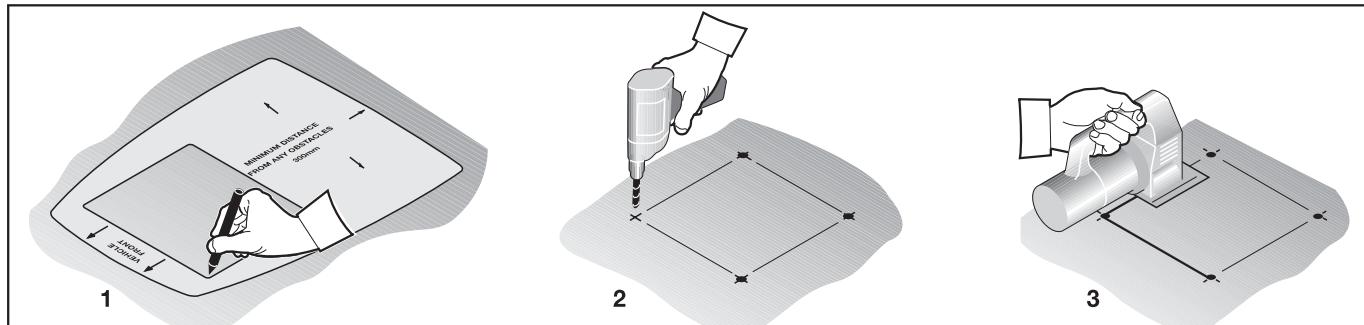


**Danger of electrical hazards.**  
Turn all power sources off



#### Using an existing opening

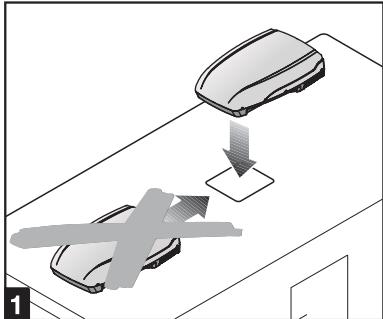
1. Remove the skylight cover.
2. Clean the installation opening all around by removing any adhesive residues.
3. Fill any existing screw hole or deformation with filler or silicone.



#### New installation opening

1. Using the printed cardboard template supplied with the unit, find the position and dimensions of the new opening.
2. Drill the four corners.
3. Cut by joining the previously made holes.
4. If necessary, mount a reinforcing wooden frame.

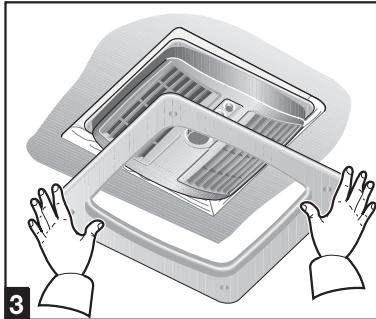
## 2.3. Mounting the air conditioner



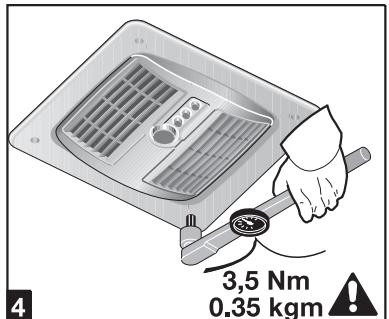
1  
Set the air conditioner onto the roof opening. Never slide the air conditioner on the roof, but lift when moving it.



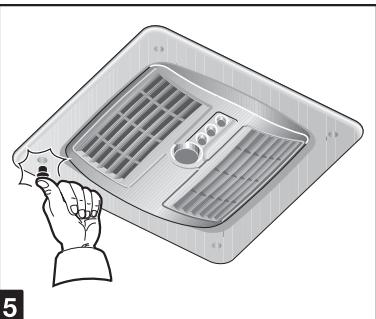
2  
Do the electrical connection as described in paragraph 2.4.



3  
Before mounting the plastic frame, use it to center the air conditioner on the opening.



4  
Fit the plastic frame and tighten the screws using a dynamometric wrench. Always tighten to the recommended torque. Do not overtighten!

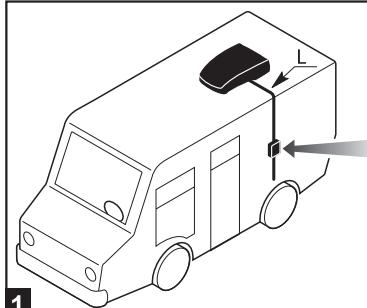


5  
Close the holes with the plugs provided.

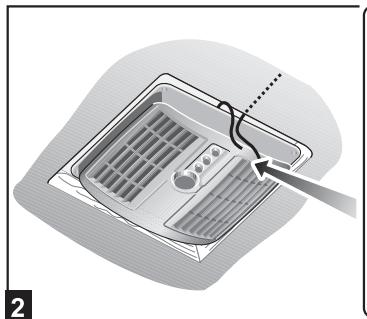
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## 2.4. Electric connection

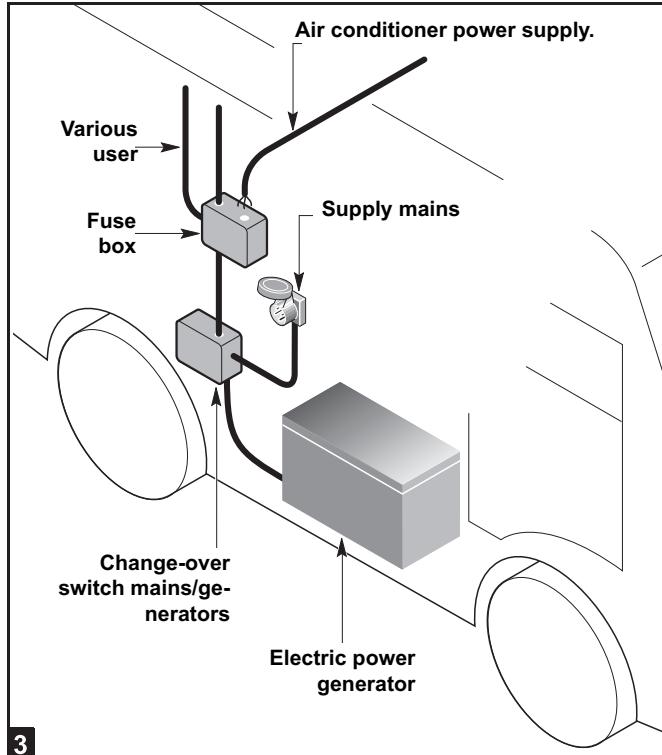
For the electric connections, always follow the national and local regulations



1  
Arrange a specific electric system protected by a 10-amp slow fuse.



2  
Connect the wires to the air conditioner.



3  
Connect the electric system to a circuit supplying the required power (see technical data) and fitted with a good ground system.

#### 3.1. Troubles, causes, solutions

CAUSA	SOLUTION																	
	temperature less than 18°C	temperature over 40°C	thermostat wrongly positioned	defective thermostat	switch wrongly positioned	defective heating resistance	refrigerant gas is not enough	damaged compressor	thermal exchange batteries are dirty	defective internal fan	air filter is clogged	defective external fan	water outlet holes are clogged	damaged sealing gasket	no power supply	low power supply (less than 200V)	defective capacitor	defective thermal protection
the air conditioner does not cool sufficiently	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	
the air conditioner does not heat enough	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	DO	
no air circulation into the vehicle																		
water leaks into the vehicle																		
the air conditioner does not start																		
the air conditioner stops running																		

#### 3.2. Extraordinary maintenance

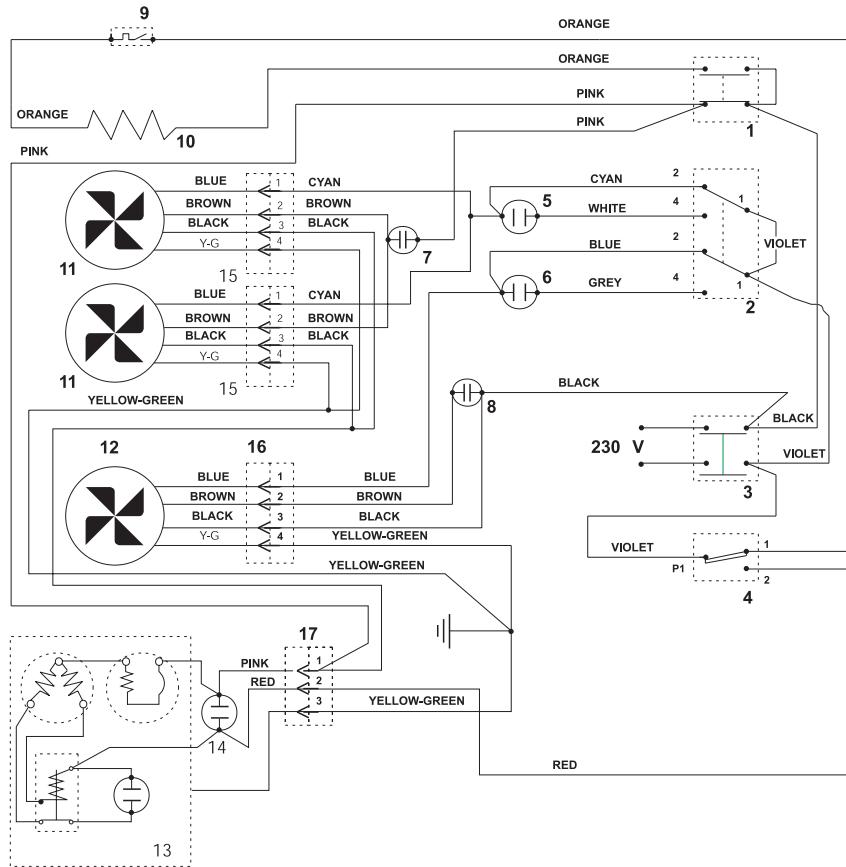
For the best performance of your air conditioner, have your dealer/workshop clean it thoroughly before use:

1. thermal exchange batteries
2. water outlet holes are properly cleaned.

#### 3.3. Recycling

Regarding disposal and recycling, follow the national or local regulations. To this end, address to the authorised environment bodies.

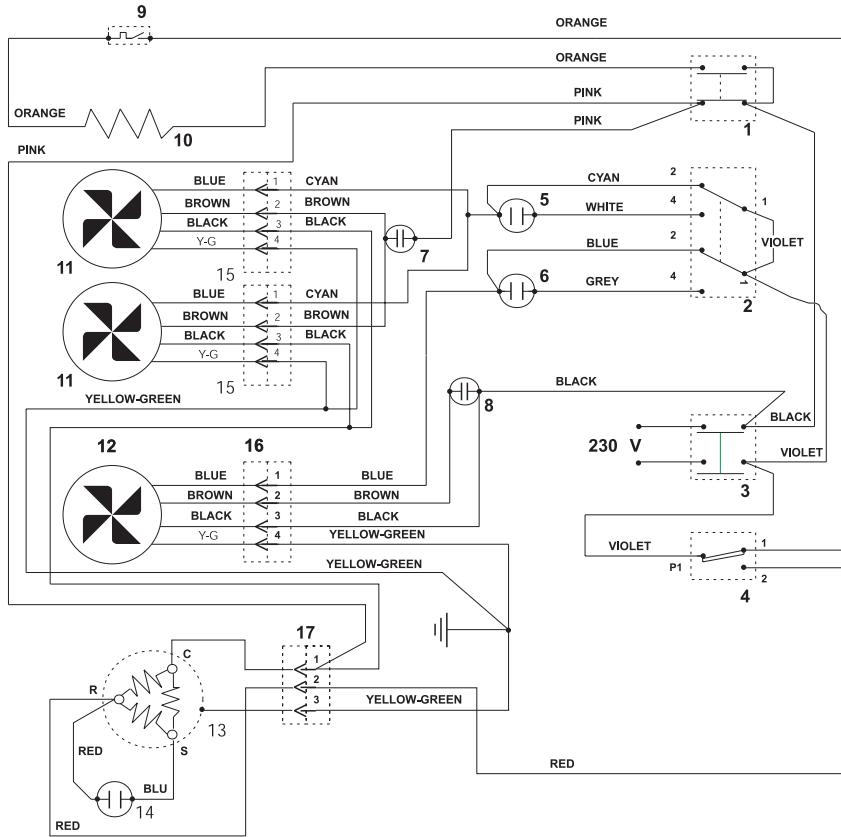
## B1100S wiring diagram



	Description
1	Bipolar switch
2	Fan speed commutator
3	Main switch
4	Thermostat
5	Capacitor
6	Capacitor
7	Capacitor
8	Capacitor
9	Thermal switch
10	Resistance
11	Condenser fan
12	Evaporator fan
13	Compressor
14	Starting capacitor
15	4-pin connector
16	4-pin connector
17	3-pin connector

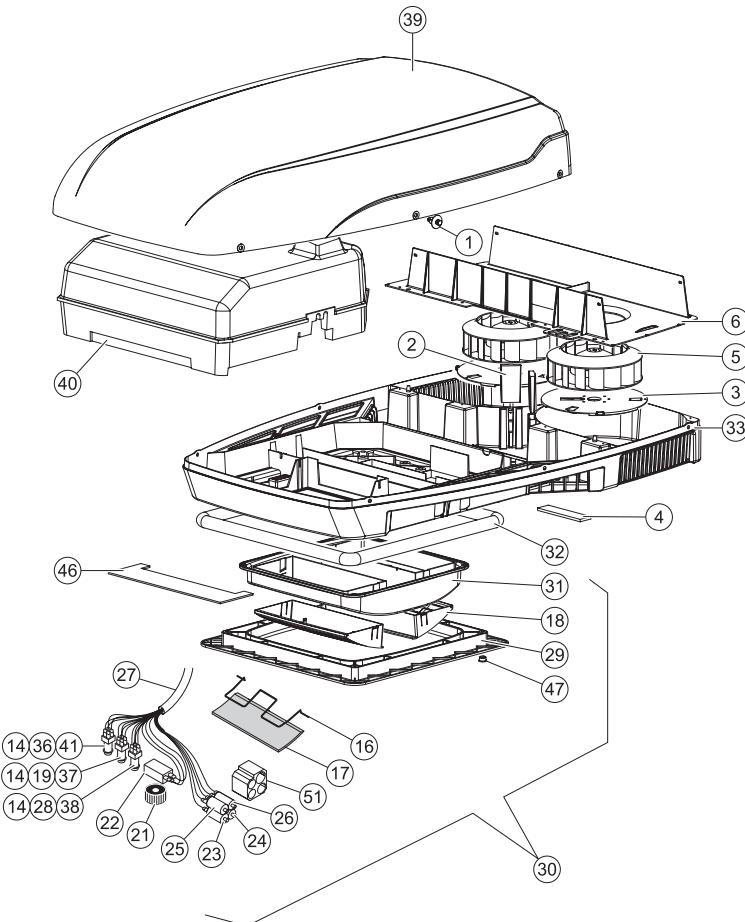
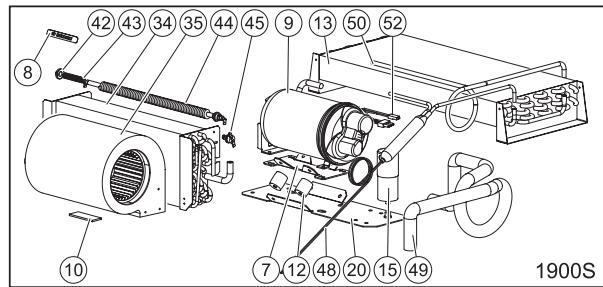
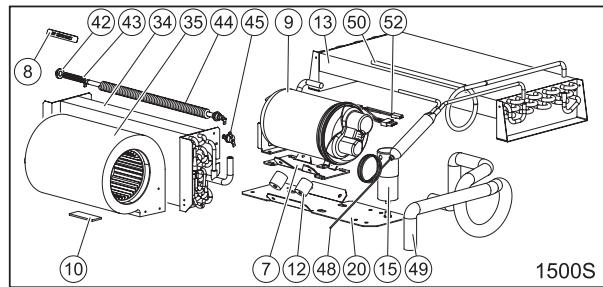
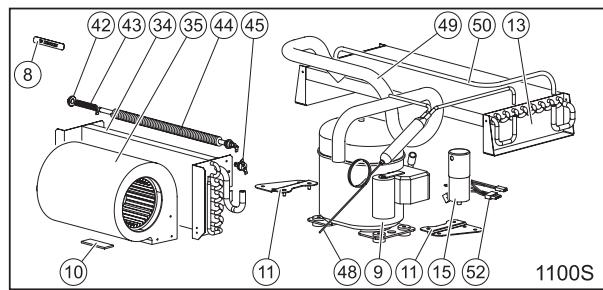
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16	4-pin connector
17	3-pin connector

## Spare part list B1100S - B1500S - B1900S



# Spare part list B1100S - B1500S - B1900S

N.	DESCRIPTION
1	TWO STAGE RIVET
2	COVER
3	PLATE
4	GASKET
5	FAN
6	AIR CONVEYOR
7	HOLDER
8	LABEL
9	COMPRESSOR
10	GASKET
11	PLATE
12	VIBRATION-DAMPER
13	CONDENSER
14	CONTACT SUPPORT
15	CAPACITOR
16	FILTER SPRING
17	FILTER
18	GRILLE
19	FAN BUTTON
20	PLATE
21	THERMOSTAT KNOB
22	THERMOSTAT
23	CAPACITOR
24	CAPACITOR
25	CAPACITOR
26	CAPACITOR

N.	DESCRIPTION
27	WIRING
28	COLD/HEAT BUTTON
29	FRAME
30	AIR DIFFUSER (COMPLETE)
31	AIR DIFFUSER
32	GASKET
33	PAN BASE
34	EVAPORATOR
35	FAN
36	0/1 BUTTON
37	DEV/DEV SWITCH
38	NA/NC SWITCH
39	COVER
40	HEAT INSULATOR BOX
41	NA/NA SWITCH
42	WASHERS
43	SPRING
44	RESISTOR
45	THERMAL SWITCH
46	INSULATOR
47	CAP
48	KIT FILTER
49	PIPE
50	PIPE
51	CAPACITOR SUPPORT
52	WIRING COMPRESSOR

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